

CA

VCYTCHUSHIN, N. V.

PROCESSSES AND PROPERTIES INDEX

11D

Chemical composition of the corn kernel. N. V.  
Volychushin. Trans. Central Sci. Research Inst. Sugar  
Tech. (U. S. S. R.) No. 9, 26-33 (1932).—Tables giving  
the content of total protein, starch and fat of different  
kinds of corn kernels, with and without embryo, are  
presented. The analyses were made on corn from the  
three successive years 1925-26-27. V. D. Karpenko

MATERIALS

ATA-ASA METALLURGICAL LITERATURE CLASSIFICATION

USSR/Cultivated Plants - Grains

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53539

Author : Voytchishin, N.V.

Inst : Khar'kov University

Title : Selection of Winter Wheat for Resistance to Rust

Oriz Pub : Vopr. metodiki selektsii pshenitsy i kukuruzy. Khar'kov,  
USSR, 1957, 81-86

Abstract : Materials of the North Osetin Selection Station on the  
Application of a system of seed-cultivation sowing me-  
thods with regard to the preservation and strengthening  
of rust resistance in the varieties under cultivation.  
By crossing Argentine spring varieties Vencedor x Koveyl  
and (Koured x Fulcaster 266287) x Klein 33 highly immune  
to rust varieties osetinskaya 3, Yubileynaya Ossetii,  
Skorospelki L-1, L-2, L-3, - were obtained. It is

Card 1/2

- 7 -

VOYTCISHIN, N. V.

Caucasus, Northern - Wheat

New rust-resistant varieties of winter wheat for foothills of the Northern Caucasus.  
Sel. 1 sem. 19 No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

1. VOYTCHISHINA, O. N.
  2. USSR (600)
  4. Uredineae
  7. Development of rust resistance of hybrids of winter wheat, Sel.i sem., 20, No. 5, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

USSR/Cultivated Plants - Grains

M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53540

Author : Voytchishina, O.N.

Inst : Khar'kov University

Title : Increased Disease Resistance in Winter Wheat Hybrids by  
Means of Directed Breeding.

Orig Pub : Vopr. metoliki selektsii pshenitsy i kukuruzy Khar'kov,  
Un-t, 1957, 87-89

Abstract : The experiments with a 21-hybrid combination of winter  
wheat, selected by the North Ossetin Selection Station,  
were conducted at the immunity laboratory of VIZR(The  
All-Union Scientific Research Institute for the Protec-  
tion of Plants). Experiments included the following:  
side-dressing with P and K (I), spraying of the plants  
with KCl (II), and growing corn over the preceding crop

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- 8 -

VOYTCHISHINA, O.N., kand. sel'skekhezyaystvennykh nauk.

Increasing the rust resistance of wheat by foliar feeding.  
Agrobiolegiia no.6:138-140 N-D '58. (MIRA 12:1)

IVsesoyuznyy institut zashchity rasteniy, laboratoriya imuniteta,  
g. Leningrad.  
(Wheat--Disease and pest resistance)

1. VOYTCHISHINA, O. N.
  2. USSR (600)
  4. Wheat
  7. Development of rust resistance in hybrids of winter wheat. Sel. i sem. 20, No. 5, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953. Unclassified.

VOYTEK, V. [Vojtek, V.]

Antituberculosis vaccination in the Czechoslovak Socialist  
Republic. Probl. tuberk. 41 no.4:6-10 '63 (MIRA 17:2)

Chemoprophylaxis of tuberculosis in the Czechoslovak Socialist  
Republic. Ibid:10-13

*VOYTERH, A.A.*

Vyosznyts'kyj et al. "Vysokochastotne po vysokochastotnijm protsessam v makhinostroyenii i elektronike". Sov. radio, Moscow, 1959.

Rukovodstvo i ogranichenye perevodomu i study svezchajem "Khimicheskaja Drive i automatika v Industrial'nyx Sistemah". Transaction of the Conference (Moscow, Gorkomgosprom, 1960, 470 p., 10,000 copies printed).

General Editor: J. I. Petrow, A. A. Sloboda, and N. G. Chitilina; Eds.: I. I. Sol, and

L. F. Shlyapnikov, V. A. Krasikov, K. P. Tsvetkov, and G. G. Larinov.

Purpose: The collection of reports is intended for the scientific and technical personnel of scientific research institutes, plants and schools of higher education.

Content: The book is collection of reports submitted by scientific workers at plants, scientific institutes and schools of higher education at the third international conference on automation in industrial processes in Moscow on April 17-19, 1960. The Conference was called by the Academy of Sciences USSR, the Central Scientific Research Planning Commission (CSN), the CTRI (Sov. Akademiya Nauk), the All-Union Committee on automatics (All-Union Committee on automated electric drives), the CCT (Central Institute of the Academy of Sciences USSR) and the Institute of Mathematics (Institute of Mathematics of the Academy of Sciences USSR). It was the purpose of the Editorial Board to arrange the reports in a way which would ensure a relatively systematic presentation of theoretical and practical problems relating to electric drives and automatic control of industrial mechanisms used in various branches of industry. Basic problems of modernized electrical machinery and their solutions are outlined. The book also contains articles on electric machinery and methods of automation. Considerable attention is paid to non-electrical automatic systems, including systems with mechanical or devices of opticals of illusions and nonlinear systems in regulation and control systems. Reports already published in journals or technical publications have been considerably abridged and some additional data are reported in tables V or XII in transactions or in the journal. Characteristics are marked with an asterisk. In parentheses are mentioned references concerning one of the reports. General problems concerning the theory and application

#### PRINCIPLE OF ELECTRIC DRIVE AND AUTOMATION OF CONTROL

Balashov, N. V., Candidate of Technical Sciences. Dynamic Properties of Control Systems for DC Drives With Magnetic Amplifiers	146
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Kostylev, V. I., Doctor, Candidate of Technical Sciences. Thermal Processes in Electric Motors	176

VOYTEKH, A.A.

Diagrams of three-speed single-phase asynchronous condenser  
motors with short-circuited rotors. Energ. i elektrotekh.  
prom. no.2:47-52 Ap-Je '62. (MIRA 15:6)

1. Institut elektrotekhniki AN USSR.  
(Electric motors, Induction)

VOYTEKH, Aleksandr Arsen'yevich; POSTNIKOV, I.M., doktor tekhn.  
nauk, prof., otv. red.; YEVSEYENKO-MIKYURENKO, I.V.,  
red.

[Multiple-speed single-phase capacitor motors] Mnogoskorosnye  
odnofaznye kondensatornye dvigateli. Kiev, Naukova  
dumka, 1964.. 206 p. (MIRA 17:9)

VOYTEKH, A.A.; FRIZ-PALIY, Yu.I.

A device for measuring the angular velocity of a system in  
steady operation. Energ.i elektrotekh.prom. no.4:26-28 O-D '62.  
(MIRA 16:2).

1. Institut elektrotechniki AN UkrSSR.  
(Electric driving) (Electric measurements)

SPITSYN, Vikt.I., akademik; VOYTEKH, O.

Complex formation of some  $\alpha$ -hydroxy acids with yttrium and cerium. Dokl.AN SSSR 133 no.3:613-616 J1 '60.  
(MIRA 13:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Yttrium compounds) (Cerium compounds)

VOYTEKH', O.; SPITSYN, Vikt.I., akademik

Effect of an organic solvent on the separating capacity of  
 $\alpha$ -hydroxyisobutyric acid. Dokl. AN SSSR 136 no.2:339-341 '61.  
(MIRA 14:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.  
(Isobutyric acid) (Rare earths)

VOYTEKH, O.

S/020/60/133/03/09/013  
B016/B068

AUTHORS: Spitsyn, Vikt. I., Academician, Voytekh, O.

TITLE: Study of the Formation of Complex Compounds of Some  
 $\alpha$ -Hydroxy Acids With Yttrium and Cerium

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 3,  
pp. 613 - 616

TEXT: The compounds mentioned in the title are used in the chromatographic separation of mixtures of rare-earth elements (Refs. 1-3). Data required to find the optimum structure and composition of the hydroxy acid used are not given in publications, however. The authors studied the subject mentioned in the title using microamounts of yttrium and cerium without carriers. They used aliphatic  $\alpha$ -hydroxy acids containing various numbers of carbon atoms, such as glycolic, lactic,  $\alpha$ -hydroxy isobutyric,  $\alpha$ -hydroxy isovaleric, and  $\alpha$ -hydroxy isocaproic acid. A KY-2 (KU-2) type cationite was used as the solid phase. The specific activity of the working solutions containing  $Y^{91}$  or  $Ce^{144}$  was about 6000 counts per minute/ml. In order to establish the distribution coefficient  $\varphi$  of  $Y^{3+}$

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Study of the Formation of Complex Compounds S/020/60/133/03/09/013  
of Some  $\alpha$ -Hydroxy Acids With Yttrium and B016/B068  
Cerium

and  $Ce^{3+}$  between the resin and the solution under static conditions, the radioactivity in the original solution and in the same solution was measured after equilibrium with the resin had been attained. The ionite was used in the Na form. The coefficient  $\varphi$  was calculated from the equation  $\varphi = xv/cm$  with  $x$  being the residual activity in the resin,  $c$  the residual activity in the solution,  $v$  the volume of the solution in ml, and  $m$  the weighed portion of the air-dry sample. The experiments were carried out at  $20 \pm 1^\circ C$ . Fig. 1 shows the  $(\log \varphi - \log [A^-])$  curves which were obtained by plotting the results achieved in the diagram  $\varphi - [A^-]$  (concentration of the added ion). The values of  $\varphi^0$  (i.e.  $\varphi$  for a zero concentration of the added ion) are:  $18\ 160 \pm 1200$  for yttrium, and  $26\ 170 \pm 2000$  for cerium. The stability constants of the complex compounds were calculated according to S. Fronaeus (Ref. 7).  $\varphi$  for the three types of complex compounds assumed to exist is calculated from equation (1). The total stability constants of these complex compounds  $MA_1^{2+}$ ,  $MA_2^+$ , and  $MA_3^-$ , viz.  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , may be calculated from equation (2). Fig. 2 shows an example of such calculations for sodium  $\alpha$ -hydroxy isobutyrate. Based on values found in this manner, the authors

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Study of the Formation of Complex Compounds of Some  $\alpha$ -Hydroxy Acids With Yttrium and Cerium

8/020/60/133/03/09/013  
B016/B068

calculated the content of various forms of complex compounds as a function of the concentration of the substance to be added (Fig. 3). Similarly, data on the stability constants of the complex compounds of Y and Ce with the acids listed above were found (Table 1). Data obtained are similar to those which are given in publications (V. I. Paramonova, Ref. 9). From their results, the authors conclude that the strength of the bond of the hydrogen ion to the acid radical in the series of monobasic  $\alpha$ -hydroxy acids, is proportional to the strength of the ionic bond of rare-earth elements in complex compounds which are formed by these acids. Fig. 4 gives additional data on  $\alpha$ -hydroxy isocaproic acid. From these, the importance of the volume factor of the added substance can be seen. The authors found that  $\alpha$ -hydroxy isobutyric acid is the best eluting agent. A somewhat improved separation can be expected, by using  $\alpha$ -hydroxy isovaleric acid. There are 4 figures, 1 table, and 11 references: 4 Soviet, 2 German, 3 American, 1 Swedish, and 1 Czechoslovakian.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 18, 1960

Card 3/3

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VOYTEKHOV, A. A.

Defended his Candidates dissertation in the Chemistry Faculty of Moscow State University on 2 June 1952.

Dissertation: "The Influence of Several Physical Factors on the Kinetics of Dehydrogenation of Cyclohexane and Hydrogenation of Benzene,"

SO: *Vestnik Moskovskogo Universiteta, Seriya Fiziko-Matematicheskikh i Yestestvennykh Nauk, №. 1, Moscow, Feb 1953, pp 151-157: transl. in W-29782*, [redacted]

"APPROVED FOR RELEASE: 08/09/2001

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VOYTEKHOV, A. A.

Voytekhev, A. A. and Orochko, D. I.: "Thermal Effects of Aromatization of Gasolines and Ligroins" Transactions of the All-Union Scientific Research Institute of Synthetic Liquid Fuel and Gas, Moscow, Gostoptekhizdat, 1950, volume II.

SULIMOV, A.D.; KARZHEV, V.I.; ZHOKHOVSKAYA, T.V.; OLEVSKIY, V.M.; VENDEL'SHTEYN,  
Ye.G.; SIL'CHENKO, Ye.I.; SHAVOLINA, N.V.; VOYTEKHOV, A.A.

Producing the raw material for synthetic fibers using petroleum products.  
(MLRA 9:7)  
Khim.i tekhn.tepl. no.1:33-43 Ja '56.  
(Petroleum) (Fibers)

VOYTEKHOV

GONCHAROVA, N.V.; VOYTEKHOV, A.A.; KARZHEV, V.I.; OROCHKO, D.I.

Indirect means for determining the relative activity of  
catalysts. Khim. i tekhn. topl. i masel no.1:3-13 Ja '57.  
(MLRA 10:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Neftyanoy  
promyshlennosti.  
(Catalysts)

VoyTehkov, A.A.

GONCHAROVA, N.V.; VOYTEKHOV, A.A.; KARZHEV, V.I.; OROCHKO, D.I.

Indirect methods for determining relative activity of catalysts.  
Khim. i tekhn. topl. i masel no.3:7-14 Mr '57. (MIRA 10:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotki  
nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.  
(Catalysts)

GONCHAROVA, N.V.; KRIVOZUBOVA, N.V.; YEVSEYEV, G.D.; VOYTEKHOV, A.A.;  
KASATKIN, D.F.; KARZHEV, V.I.

Hydrogenation for obtaining products with a high content aromatic  
hydrocarbons. Khim. i tekhn. topil. i masel 3 no.12:15-21 D '58.  
(MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.  
(Petroleum products) (Hydrogenation)

SOV/65-58-12- 4/16

AUTHORS: Goncharova, N. V; Krivozubova, N. V; Yevseyev, G. D;  
Voytekhov, A. A; Kasatkin, D. F. and Kartzhev, V. I.

TITLE: Preparation of Products with a High Aromatic Hydro-carbon Content by Hydrogenation (Polucheniye produktov s vysokim soderzhaniyem aromaticeskikh uglevodorodov metodom hidrogenizatsii)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 12,  
pp 15 - 21 (USSR)

ABSTRACT: Processes for the hydrogenation of high-molecular liquid products and solid fuels are very important for the manufacture of motor fuels. The authors investigated the hydrogenation of two samples of crude over a specially treated catalyst, and showed that the end-products contained a high amount of aromatic hydrocarbons. The process was carried out in a laboratory apparatus with a 1.5 litre reactor working at pressures up to 700 atm. (Fig 1). The broad fraction of a liquid phase hydrogenate of tar obtained by semi-coking of Cheremkhovsk coal, and the gas-oil fraction boiling between 160 - 280°C obtained by catalytic cracking of the vacuum distillate of S-petroleum, were used as starting materials. Their

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SOV/65-58-12-4/16

### Preparation of Products with a High Aromatic Hydrocarbon Content by Hydrogenation

physico-chemical characteristics are given in Table 1. Bicyclic aromatic hydrocarbons are converted over a chromium catalyst, at temperatures above 460°C, and at hydrogen pressures from 300 - 600 atms into monocyclic hydrocarbons in high yields. These compounds, with long side chains, are dealkylated and simpler homologues of benzene are formed at 500°C and a pressure of 300 atms. The hydrogenate contained a fraction boiling up to 180°C which equalled approximately 46%; benzene formed 23% of this fraction. The quantity of the initial decalin in this mixture remained practically unchanged. Variations in the activity of the catalyst are shown in a graph (Fig.2). A series of experiments was carried out to determine the reaction kinetics with fresh material up to its dephenolisation when the pressure of hydrogen equalled 600 atms, at various temperatures and various volume rates (Fig.3). Results are given in the form of kinetic isotherms (Fig.4). On comparing these isotherms it can be seen that the highest yields of aromatic hydrocarbons are obtained at a temperature of 500°C and a volume rate of 0.5 - 0.7 kg/litre hour<sup>-1</sup>. At pressures

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SOV/65-58-12-4/16

Preparation of Products with a High Aromatic Hydrocarbon Content by  
Hydrogenation

of 300 atms the yield of hydrogenate constituted 87% and contained 71% of the fraction boiling at 160°C and 56% of sulphonated hydrocarbons boiling at the same temperature. At 600 atms pressure slightly less satisfactory results were obtained. Results of laboratory tests on three samples, which were carried out at almost optimal conditions, are listed (Table 2). Table 3 gives the content of aromatic hydrocarbons in hydrogenation products. The octane number of the pure fraction equals 81.3 and is increased to 86.8 when 1 ml/kg of P-9 is added. Further investigations concerned the effect of the chemical composition of the starting material; these were carried out on fractions boiling between 160 - 280°C. The hydrogenates contained a large quantity of aromatic hydrocarbons (up to 70%). A 68% yield of the fraction boiling at 160°C, with a 68% content of aromatic hydrocarbons was obtained on processing gas-oil. It was found that the chemical composition of the initial material hardly affects the

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SOV/65-58-12-4/16  
Preparation of Products with a High Aromatic Hydrocarbon Content by  
Hydrogenation

yield of C<sub>6</sub> - C<sub>8</sub> aromatic hydrocarbons. Table 5: re-  
sults of hydrogenation of different types of raw mater-  
ial. There are 5 Tables, 4 Figures and 10 References:  
5 English, 1 German and 4 Soviet.

ASSOCIATION: VNII NP

Card 4/4

VOYTEKHOV, A.A.; KARZHEV, V.I.

Alkylation of iso-octane with olefins. Neftekhimiia 1 no.2:  
201-203 Mr-Ap '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy  
promyshlennosti.

(Alkylation)  
(Octane)                   (Olefins)

"APPROVED FOR RELEASE: 08/09/2001

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120009-3"

VOYTEKHOVA, E., inzh.; GURINA, M., inzh.

What to do with a bobbin? Izobr.i rats. no.3:5-6 Mr '62.  
(MIRA 15:2)

1. Kombinat "Krasnaya Roza", g.Moskva.  
(Bobbins (Textile machinery)—Technological innovations)

MURASHKO, Mikhail Grigor'yevich; GATILLI, Pavel Dmitriyevich;  
VELIKEVICH, Pavel Adamovich; VOYTEKHOVSKAYA, Emiliya  
Aleksandrovna; ZOLOTAREV, T.L., prof., red.; BARABANOVA, Ye.,  
red. izd-va; SIDERKO, N., tekhn. red.

[Cadastral survey of water-power resources of the White Russian S.S.R.; potential hydroelectric power resources] Vodno-energeticheskii kadastr Beloruskoi SSR; potentsial'nye gidroenergoresursy. Minsk, Izd-vo Akad. nauk BSSR. Vol.2. [Album of cadastral graphs] Al'bom kadastrovykh grafikov. Pod red. T.L.Zolotareva. 1962. 217 p. (MIRA 16:1)  
(White Russia—Hydroelectric power)

33913

S/640/61/000/000/034/035  
D205/D302

15.2230

21.2100

AUTHORS: Voronov, N. M., Voytekhova, E. A. and Kovalev, I. T.

TITLE: Phase diagram of the system uranium dioxide-zirconium oxide

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Stroyeniye splavov nekotorykh sistem s uranom i toriyem. Moscow, Gosatomizdat, 1961, 467-481

TEXT: This phase diagram which is of interest as pertaining to a prospective high-temperature material for heat-evolving elements was investigated earlier by Lambertson and Mueller (Ref. 1: J. Amer. Ceram. Soc., 36, 11, 365, 1953). However, the published data are incomplete, and the methods of investigation and preparation of the samples were not sufficiently precise. In this investigation, an attempt was made to use the data published in Ref. 1 as a guide; however, after the first experiments, large discrepancies were established. The discrepancies led to a complete re-checking of the phase diagram. Uranium dioxide and zirconium oxide ✓

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D205/D302

Phase diagram of ...

incorporating not more than 0.1% impurities were employed. The alloys were prepared by smelting in an electric arc furnace, in argon, of briquetted oxide mixtures. Homogeneity was ensured by multiple resmelting. The X-ray analysis (Fe radiation) was the principal method of investigation and its findings were confirmed in some instances by microstructural analysis. The thermal treatment was performed on a tungsten-wire heater on samples having a volume less than 50 mm<sup>3</sup>. Temperature measurements were made by reference to melting points of known materials, the error not exceeding + 25°C. Alloys hardened from 2000, 1900, 1800, 1700, 1650, 1550, 1500 and 1400°C were investigated. The data are shown on a phase diagram UO<sub>2</sub> - ZrO<sub>2</sub>. UO<sub>2</sub> forms a continuous series of solid solutions with ZrO<sub>2</sub>, which have the fluorite structure of UO<sub>2</sub> up to 51.3 mol.% of ZrO<sub>2</sub>. Beyond this point the structure passes into a tetragonal one which is that of the high-temperature modification of ZrO<sub>2</sub>. Down to 1675°C these solid solutions do not change. Beginning from 1675°C and below (depending on the concentration) the

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Phase diagram of ...

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D205/D302

solid solutions in the 13.5 - 86.0 mol.% ZrO<sub>2</sub> range decompose into two solid solutions, one based on UO<sub>2</sub> containing 13.8% ZrO<sub>2</sub>, the second based on ZrO<sub>2</sub> containing at least 14.0% UO<sub>2</sub> at 140°C. The ZrO<sub>2</sub>-based solid solutions undergo transformations at temperatures from 1040°C for pure ZrO<sub>2</sub> down to 140°C at ZrO<sub>2</sub> content of 14 mol.%. There are 6 figures, 2 tables and 5 references: 1 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: W. A. Lambertson and M. H. Mueller, J. Amer. Ceram. Soc., 36, 11, 365 (1953); P. Duver and F. Odel, J. Amer. Ceram. Soc., 33, 9, 247, (1950); R. Geller and P. Yavorsky, J. Ceram. Abstr., 24, 10, 191, (1945). ✓

Card 3/3

1. VOYTEKHOVA, V. A.
2. USSR (600)
4. Plants, Effect of Chemicals on
7. Reasons for loss of dicotyledons under the influence of certain herbicides.  
Agrobiologija no. 5, 1952.
  
9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

KOROLEV, L. I., VOYTEKHOVA, V.A., STONOV, L.D.

Magnesium chlorate as an effective cotton defoliant. [Trudy]  
NIUIF no.167:208-215 '60. (MIRA 13:8)  
(Magnesium chlorate) (Defoliation) (Cotton growing)

VOYTEKHOVA, V.A.

[Chemicals for controlling weeds (herbicides)] Khimicheskie  
sredstva bor'by s pustynnymi (gerbitsidami). Moskva, M-vo khim.  
promyshl., 1958. 19 p.

(MIRA 14:4)

(Herbicides)

VOYTEKHOVA, V. A. Cand Agr Sci -- (diss) "On causes of selective  
action of herbicides of derivatives <sup>of</sup> phenoxy-acetic acids". Mos, 1956.  
13 pp 21 cm. (Min of Chem Industry USSR. Sci Res Inst of Fertilization  
and Insect~~s~~-Fungicides im Prof. Samoylov). 110 copies. (KL, 9-57, 102)

- 27 -

- USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M

Abs Jour : Ref Zhur Biol., No 13, 1958, 82432

Author : Korolev, L.I., Voytekhova, V.A., Stomov, L.D.

Inst : Uzbek Scientific Research Institute of Cotton Raising

Title : Testing New Preparations on Pre-Harvest Removal of Cotton Plant Leaves.

Orig Pub : V Sh.: Materialy Meziresp. Soveshchaniya po koordinatsii nauchno-issled. rabot po khlopkovodstvu, 1957, Tashkent, AN UzSSR, 1957, 215-218

Abstract : In 1955-1956 the Plant Protection Laboratory of NIUIF conducted tests on a series of chemical compounds for the purpose of finding new defoliants and desiccants. More than 100 new chemical compounds were tested. As the result of the tests, 7 prospective preparations were separated the greater part of which is represented by

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Uoy TEKHUA Yea

PLATE 1 BOOK INFORMATION 807/2714  
International Conference on the Peaceful Uses of Atomic Energy - 2nd.  
Geneva, 1958.

Soviet Academy of Sciences, Publishing Directorate, Publishing House of Radioelectronics and  
(Institute of Soviet Electronics), Institute of Coal and Nonferrous Metals) Moscow,  
Bul. Akad. SSSR, 35/59, 070-00 (Series: 251). Friday, Vol. 3, 6,000 copies  
printed.

Ed. (Title page): A.A. Bodansky, Academician, A.P. Vinogradov, Academician,  
V.L. Tsvetkov, Corresponding Member, USSR Academy of Sciences, and  
A.P. Zaitsev, Doctor of Technical Sciences, Ed. (Title book): V.Y.  
Pavlov and G.M. Poblitsev, Tech. Ed.: N.I. Matan.

SYNOPSIS: This volume is intended for scientists, engineers, technicians,  
and students working in the production and peaceful application of atomic  
energy. The problems and methods of organization of schools of atomic  
energy in higher technical education where the subject is taught and for people  
interested in atomic science and technology.

CONTENTS: This is a volume of a collection of reports on atomic energy  
presented by experts of various countries at the Second International Conference on the  
Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958.  
The First part, edited by A.N. Zaitsev, is  
Volume 3 consists of two parts. The First part, edited by G.I. Kravets, contains 27 papers  
devoted to geology, properties, extraction and processing of nuclear fuels and  
radioactive materials. The second part, edited by G.I. Kravets, contains 27 papers  
on metallurgy, metallurgy, processing technology of nuclear fuels and  
reactor materials, and neutron irradiation effects on metals. The titles of the  
individual papers in not cases correspond with those in the  
official English language edition of the Conference Proceedings. See  
807/265. For the titles of the other volumes of the set.

- Bodansky, I.V., and A.I. Volkov. Investigating the Reactors of Small  
Reactors and Fractional Distillation by Carbon Tetrachloride  
(Report No. 229) 205
- Bodansky, I.V., Tech. Institutions, and L.A. Petushkova. Phase Diagram  
for the  $\text{CO}_2$ - $\text{H}_2$  and the  $\text{CO}_2$ - $\text{H}_2\text{O}$  Systems (Report No. 249) 215
- Bodansky, E.P., A.S. Vinogradov, and V.I. Rabinovich. Recovery  
of CO<sub>2</sub> - Al<sub>2</sub>O<sub>3</sub>, MgO - Al<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> (Report  
No. 259) 221
- Bodansky, G.I., V.V. Sklarev, E.P. Vinogradov, A.M. Kostylev, and  
L.A. Petushkova. The Influence of Temperature Methods on the  
Properties and Properties of Uranium (Report No. 257) 223
- Bodansky, G.I., and L.A. Petushkova. Phase Diagrams of Certain Thermally  
Stable Oxides and Carbides. Phase Diagrams of Certain Thermally  
Stable Oxides and Carbides (Report No. 261) 227

Case 6/11

PETRU, M.; SYROVATKA, A.; VOYTEKHOVSKA, M. [Vojtechovska, M.]

Treatment of urogenital trichomoniasis with flagyl. Akush. i  
gin. 40 no.5:93-95 S-0 '64. (MIRA 18:5)

1. Klinicheskaya laboratoriya Parazitologicheskogo instituta  
Karlova universiteta (dir. - prof. Otto Irovets [Otto Irovec],  
Praga, Chekhoslovakiya.

VOYTEKHOVSKAYA, E.A.

Approximate computation of a three-dimensional slowly changing  
nonuniform motion of fluid. Inzh.-fiz.zhur. no.5:42-47 My '62.  
(MIRA 15:7)

1. Energeticheskiy institut AN BSSR, Minsk.  
(Gas flow)  
(Approximate computations)

VOYTEKHOVSKAYA, E.A., inzh.

Construction of a flow diagram for an irregular slowly varying motion of a liquid. Izv. vys. ucheb. zav.; energ. 5 no.1:119--124 Ja '62. (MIRA 15:2)

1. Institut energetiki AN Belorusskoy SSR. Predstavlena proizvodstvennym soveshchaniyem laboratori i gidroenergetiki i hidrodinamiki.  
(Fluid dynamics)

GATILLO, P.D.; VOYTEKHOVSKAYA, E.A.

Basic characteristics of the flow of rivers belonging to  
the Western Dvina River basin (within the boundaries of  
the White Russian S.S.R.). Trudy Inst.energ. AN BSSR  
no.10:188-232 '59. (MIRA 13:6)  
(White Russia--Rivers)

MURASHKO, Mikhail Grigor'yevich; GATILLO, Pavel Dmitriyevich; VELIKEVICH,  
Pavel Adamovich; VOITKEHOVSKAYA, Emma Aleksandrovna; BLIZNYAK,  
Ye.V., prof., doktor tekhn.nauk, zаслуженный деятель науки и  
tekhniki [deceased]; ZOLOTAREV, T.L., prof., doktor tekhn.nauk,  
red.; MARIKS, L., red.izd-va; VOLOKHANOVICH, I., tekhn.red.

[Cadastral survey of water-power resources of the White Russian  
S.S.R.; potential hydroelectric power resources] Vodnoenergeti-  
cheskii kadastr Belorusskoi SSR; potentsial'nye gidroenergoresursy.  
Pod red. T.L.Zolotareva. Minsk, Izd-vo Akad.nauk BSSR. Vol.1.  
1960. 281 p. Maps. (MIRA 1:10)  
(White Russia--Hydroelectric power)

36863  
S/170/62/005/005/006/015  
B104/B102

*10.1900*  
AUTHOR: Voytekhovskaya, E. A.

TITLE: Approximative calculation of a three-dimensional slowly varying non-uniform motion of a liquid

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 5, 1962, 42-47

TEXT: On the assumption that the resistance forces of a non-uniform and of a uniform motion are equal a system

$$\left. \begin{aligned} \frac{\partial h}{\partial x} &= i_{0x} - \frac{u_x}{g} \frac{\partial u_x}{\partial x} - \frac{u_y}{g} \frac{\partial u_x}{\partial y} - \frac{u_z}{g} \frac{\partial u_x}{\partial z} - \frac{uu_x}{K^2} \\ \frac{\partial h}{\partial y} &= i_{0y} - \frac{u_x}{g} \frac{\partial u_y}{\partial x} - \frac{u_y}{g} \frac{\partial u_y}{\partial y} - \frac{u_z}{g} \frac{\partial u_y}{\partial z} - \frac{uu_y}{K^2} \\ \frac{u_x}{g} \frac{\partial u_z}{\partial x} + \frac{u_y}{g} \frac{\partial u_z}{\partial y} + \frac{u_z}{g} \frac{\partial u_z}{\partial z} + \frac{uu_z}{K^2} &= 0 \end{aligned} \right\} . \quad (12)$$

Card 1/2

S/170/62/005/005/006/015  
B104/B102

Approximative calculation of a ...

is derived from general differential equations for an open flow with virtual viscosity coefficients. This system describes a three-dimensional slowly varying non-uniform motion when the x-axis coincides with the direction of gravity. It has one unknown less than the general differential equations. First the corresponding two-dimensional problem is solved (E. A. Voytekhovskaya, Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 1, 1962) on the assumptions that: (1) velocity between the points considered changes linearly; (2) the free surface of the liquid is unchanged. The system (12) is represented in finite difference form and the components of the velocity vector at a given point of the three-dimensional system are determined from the boundary conditions of the two-dimensional problem. The calculation is performed from the bottom of the stream towards the surface and from one side to the other. The problem is greatly simplified in cases of near to rectilinear motion. There are 2 figures.

ASSOCIATION: Energeticheskiy institut AN BSSR, g. Minsk  
(Institute of Power Engineering AS BSSR, Minsk)

SUBMITTED: December 20, 1961

Card 2/2

*Voytchovskiy*

CZECHOSLOVAKIA/Zooparasitology - Parasitic Protozoa.

G-1

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14891

Author : Voytchovskiy, Petrovitskiy

Inst : -

Title : Likvorology (?) of Toxoplasmosis (Study of the Problem of  
Likvor Investigation in Undoubted Plasmosis).

Orig Pub : Ceskosl. neurol., 1957, 20, No 2, 73-80

Abstract : A study was conducted on the spinal cord fluids of 30 patients with a pseudoneurasthenic form of toxoplasmosis and of 10 epileptic patients with positive serological reactions of toxoplasmosis. In the majority of patients mild changes in the fluids were found (hyperalbuminosis, a positive globulin reaction, etc.); however, these were more frequent than in the group of epileptics with negative tests for toxoplasmosis. After a skin reaction with toxoplasmine of schizophrenic and pseudoneurasthenic patients the frequency of deviation from the norm in spinal

Card 1/2

SHAGUN, Mariya [Shakun, M.], slesar'-sborschik; SADOVSKAYA, V. [Sadouskaia, V.], komsorg.; VOITSAKHOVSKIY, M.M.; [Voitsakhouski, M.M.], uchitel' (derevnya V. Stseblevichi, Zhitkovitskogo rayona); BIL'DZYUKEVICH, E.; KRYIVOSHEYENKO, Petr [Kryvasheenka, P.], elektromonter; SHARZEV, Anatol' [Sharaieu, A.] (derevnya Tudorovo, Shklovskogo rayona); ABRAMENKO, Valentina [Abramenka, V.], uchitel'; FRULOV, Grigoriy [Fralou, Ryhor] (g.Krichev)

Let's talk about happiness. Rab.i sial. 36 no.10:18-19 0 '60.  
(MIMA 13:10)

1. Zavod bytovykh priborov, Grodno (for Shagun). 2. Fabrika "KIM," g. Vitebsk (for Sadovskaya). 3. Vasilevichskaya dorozhnaya remontno-ekspluatatsionnaya stantsiya (for Krivosheyeno). 4. Borovichskaya srednyaya shkola Porechnenskogo rayona, Gomel'skoy oblasti (for Abramenko).  
(Women--Employment)

VOYTERO, STANISLAV

YEVDAKOV, Aleksandr Aleksandrovich; VOYTERO, Stanislav Pavlovich; VASIL'YEV,  
H.S., redaktor; MAL'KOVA, N.V., tekhnicheskij redaktor

[Master bus driving; work experience of leading drivers of the  
1st Leningrad bus depot] Masterstvo voshdenija avtobusov; iz opyta  
raboty peredovykh khofgrov' 1-ga avtobusnogo parka Leningrada. Mo-  
skva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1956. 49 p.  
(Motorbus drivers) (MLRA 10:4)

VOYTEKO, S.

Competition for the title of a communist labor group. Avt.transp.  
38 no.11:6-7 N '60. (MIRA 13:11)

1. Predsedatel' mestkoma 1-go avtobusnogo parka Leningrada.  
(Leningrad---Motorbus lines)

VOYTEKUNAS, Stanislav Stefanovich; ZUYEV, F.P., nauchnyy red.; SUDAKOVICH,  
D.I., nauchnyy red.; KAEPOV, V.V., red.izd-va; PUL'KINA, Ye.A.,  
tekhn.red.

[Designing reinforced concrete elements; from the experience of  
planning organizations in Leningrad] Konstruirovaniye zhelezobetonnykh elementov; iz opyta proektnykh organizatsii Lenina-  
grada. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.  
materialam, 1959. 210 p.  
(Reinforced concrete)

VOYTEK V, Yu.A.

Stabilization of polymers. Plast.massy no.8:77-78 '60.  
(MIRA 13:10)  
(Polymers)

VOYTELOVICH, E. A.

VOYTELOVICH, E.A.; DIKUN, P.P.; DYMARSKIY, L.Yu.; SHABAD, L.M.

Comparative study of the incidence of malignant tumors in Tukums District in the Latvian S.S.R. Vop.onk. 3 no.3:351-357 '57.

(MLRA 10:8)

1. Iz Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I.Serebrov). Adres avtorov: Leningrad, P-129. 2-ya Berezovaya alleya, d.3, Institut onkologii AMN SSSR (NEOPLASMS, statist. in Latvia (Rus))

POPOVICH, A.S., starshiy agronom-entomolog; VOYTENKO, A.N., master po  
zashchite rasteniy

Steaming of soil in greenhouses to control the root knot nematode  
Meloidogyne marioni. Zashch.rast.ot vred.i bol. 4 no.6:34-35  
N-D '59.

(Root knot)                    (Soil disinfection)  
                                  (Greenhouse management)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001861120009-3

SNEZHKO, E.I.; VOYTENKO, A.P.; KOSOERODOV, Yu.A.

Automatic regulator of a stone-cutting machine. Avtom. 1  
prib. no.1:21-23 Ja-Mr '65. (MERA 18:8)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001861120009-3"

AUTHOR: Voytenko, A., (Yevpatoriya) 107-58-6-24/58

TITLE: Mechanism for Tuning Circuits (Mekhanizm nastroyki kontura)

PERIODICAL: Radio, 1958, Nr 6, p 18 (USSR)

ABSTRACT: The mechanism of a plastic lipstick container may be used for tuning an oscillatory circuit by means of a ferrite core. The ferrite core is glued to the moving mechanism and the coil is wound on the outside of the plastic container. This type of tuning may be used for a two-tube receiver with feedback, and will cover the LW and MW range 1.5 - 1.8 times. There is one sketch.

Card 1/1 1. Radio-Tuning mechanisms

L 9878-63  
EPR/EPA(b)/EMT(1)/EWG(k)/BDS/EEC(b)-2/ES(s)-2--APFTC/LSD/  
ESD-3/AFWL/SSD--Ps-4/Pt-4/Pz-4/Fab-1--17/64

ACCESSION NR: AP300;094

S 10 44 144 10 10 4

AUTHOR: Voytenko, A. Ye.; Model', I. Sh.

72

81

TITLE: Generation of strong shock waves by electric discharges in gaps

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1760-1764

TOPIC TAGS: shock waves, electric gap discharges, moving plasma

ABSTRACT: Shock waves in a narrow gap located between two parallel nonconductive plates were investigated in order to study the expansion rate of spark channels. The experiments were made with current-rise rates of up to  $2 \times 10^{10}$  sup 1 amp/sec. A 14.4-microfarad, 10-kv bank of capacitors was used to generate shock waves in hydrogen, helium, argon, and air at a pressure of 1 atm and gap dimensions of 2--10 mm. It was found that 1) the observed velocity of motion of border g-w s the front velocity of the shock waves; 2) the velocities of broadening of a spark channel are determined mainly by current densities of discharge cross sections in accordance with  $I/S = \text{constant}$  for a discharge current increasing linearly, and  $I/S = 1/t$  for a cylindrical broadening at a constant velocity (where  $I$  is the current in amperes,  $S$  is the discharge cross section in cm sup 2, and  $t$  is the time in seconds); 3) the velocity of channel broadening depends only slightly on

Card 1/2

L 9878-63

ACCESSION NR: AP3003094

time and plasma conductivity; and 4) temperatures and pressures in a spark channel can be determined by evaluating the front velocities of the shock waves. Spark discharges with high magnitudes of  $dI/dt$  can be utilized for the generation and investigation of strong shock waves in gases. A shock-wave speed of  $8 \text{ km/sec}$  was measured in hydrogen. Orig. art. has: 6 figures and 3 formulas.

ASSOCIATION: none

SUBMITTED: 14Dec62 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: 00 NO REF Sov: 009 OTHER: 000

*RH/JS*  
Card 2/2

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001861120009-3

VOYTENKO, A.Ye.; ZYKOV, A.P.; SAMILOV, S.V.

Noninductive cable for the wiring of capacitor batteries.  
Prib. i tekhn. eksp. 9 no. 5:202 S-0 '64. (MIKA 17:12)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001861120009-3"

VOYTERKO, A.Ye.

Production of high-speed gas jets. Dokl. AN SSSR. 158  
no.6, 1278-1280 O '64. (MER- 15 12)

1. Predstavleno akademikom Ya.B. Zel'dovichem.

L 11556-66 EWT(1)/EWT(m)/EWP(m)/T/EWA(d)/FCS(k)/EWA(h) WW/EW/ME

ACC NR: AP6004895

SOURCE CODE: UR/0057/66/036/001/0178/0180

AUTHOR: Voytenko, A. Ye.

63

ORG: none

B

TITLE: Strong shock waves in air

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 178-180

TOPIC TAGS: shock wave, strong shock wave, shock wave production,  
shock wave thermodynamics, energy cumulation, explosion shock wave

ABSTRACT: An experimental arrangement for producing strong shock waves in air by explosions is described and the results of measurements of the shock waves are given. The arrangement consisted of a chamber with a spherical cover to which an outlet tube was fixed. Under the flat bottom of the chamber a plane-surfaced charge of fused half-and-half compound of TNT and cyclonite was exploded. The bottom of the chamber was a 1.5-mm aluminum plate. The walls of the cone-shaped chamber were 2-mm thick with an opening angle of about 5 degrees. The top diameters of the cone were 76 and 40 mm in the two experimental arrangements used. Spherical copper covers 4 mm thick of varying radii were used in the several experiments conducted, but the inside height of the chamber was kept constant at 27 mm. The wall thickness of the glass

Card 1/3

UDC: 533.9.07

L 114556-66

ACC NR: AP6004895

outlet tube was about 1 mm, its diameter was varied from 2 to about 25 mm, and its overall length was 200 mm. The explosion at the bottom caused a shock wave in the outlet tube with pressures up to  $10^4$  atm. The main factors affecting the parameters of the shock wave were the mean diameter of the chamber, the radius of the spherical cover, and the inner diameter and length of the outlet tube. The destruction of the glass outlet tube took place after the passage of the shock wave and therefore did not affect the results. It was found that the velocity of the shock wave increased with the diameter of the conical part of the chamber. Thus, with chamber diameters of 40 mm and 76 mm, the maximum shock wave velocities were 30 and 45 km/sec. At both cone diameters, the velocity of the shock wave decreased as the radii of the covers were increased. The curves showed a steepness maximum and then leveled off to about 10 km/sec for both the 60- and 150-mm radii and 40- and 76-mm chamber diameters. The dependence of the shock wave velocity on the outlet tube cross section was linear and inversely proportional to the diameter of the tube (about 45 km/sec with a 2-mm tube and 20 km/sec with a 25-mm tube). The shock wave velocity reached a critical value when the cover radius exceeded the diameter of the base of the chamber, after which the velocity dropped sharply. The cause of this drop remained unexplained. Generally, a monotonic drop in velocity occurred in the tube. In the narrower tubes, however, the

Card 2/3

L 114556-66

ACC NR: AP6004895

velocity dropped much more quickly. With a tube length of 150 mm,  
velocity dropped from an initial 43 km/sec to about 30 km/sec and  
12 km/sec for tube diameters of 5.1 and 1.9 mm, respectively. [F?]

SUB CODE: 20/ SUBM DATE: 10Mar65/ ORIG REF: 004 AtD Press! 4187

TS  
Card 3/3

L 41082-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(t)/ETI IJP(c) JD/WH

ACC NR: AP6027950 SOURCE CODE: UR/0020/66/169/003/0547/0549 15

6

AUTHOR: Voytenko, A. Ye.; Model', I. Sh.; Samodelov, I. S.

ORG: none

TITLE: Brightness temperature of shock waves in xenon and air

SOURCE: AN SSSR. Doklady, v. 169, no. 3, 1966, 547-549

TOPIC TAGS: shock wave, brightness temperature, SHOCK WAVE VELOCITY, XENON, AIR

ABSTRACT: Experiments were made to determine the dependence of the brightness temperature of a shock wave on its velocity. The shock wave was generated in a specially designed assembly by an explosive charge. The charge ruptured an aluminum diaphragm and discharged into a hemispherical vessel which was closed by another diaphragm connecting it with a cylindrical tube; the hemispherical vessel was filled with hydrogen, which, after rupture of the diaphragm, generated a shock wave in the cylindrical tube filled with xenon or air. The maximum shock velocities in xenon and air were 37 and 43 km/sec, respectively. The brightness temperature in xenon had a maximum of 50,000K at a shock velocity of 18 km/sec; with a further increase in velocity, it decreased to 23,000K. A maximum brightness temperature of 73,000K was recorded in air at a shock velocity of 43 km/sec. Orig. art. has: 4 figures. [PV]

SUB CODE: 20/ SUBM DATE: 228ep65/ ORIG REF: 011/ ATD PRESS: 5055

Card 1/1 11b UDC: 534.222.21535.2

L 45589-66 ENT(1)/EWP(m) MM  
ACC NR: AP6030928

SOURCE CODE: UR/0207/66/000/004/0112/0116

AUTHOR: Voytenko, A. Ye. (Novosibirsk)

79

B

ORG: none

TITLE: Acceleration of gas during its compression in a system with acute-angled geometry

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1966, 112-116

TOPIC TAGS: gasdynamics, shock wave, shock tube, plasma jet, gas jet, flow analysis, shock wave analysis, shock wave velocity

ABSTRACT: The results of an experimental investigation of a device for producing high velocity (50 to 90 km/sec), high density gas jets described previously by the author (Doklady AN SSSR, v. 158, no. 6, 1964) are presented. Brief descriptions of the device (see Fig. 1) and the measuring techniques and apparatus are given. The effects of the shape of the chamber, the material and thickness of the chamber surface, the radius of the discharge tube and its shape, and the mass of the diaphragm on the jet velocity were investigated. A system composed of a shock wave 1, a reflected shock wave 2, and the resultant oblique shock wave 3 is analyzed (see Fig. 2). An attempt is made to construct an approximate scheme for gas acceleration and compression by the plate and to carry out preliminary calculations of the gas flow. A numerical calculation carried out with air as the working gas at density  $\rho_0 = 1.3 \times 10^{-3} \text{ g/cm}^3$ .

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L 45589-66

ACC NR: AP6030928

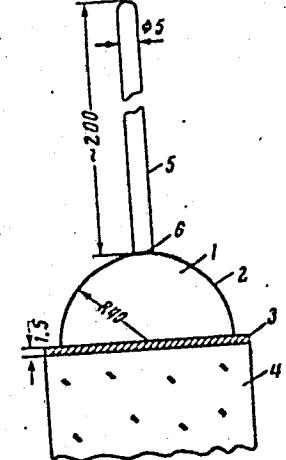


Fig. 1. Sketch of the device

1 - Gas; 2 - spherical envelope;  
3 - metallic plate; 4 - explosive  
charge; 5 - tube; 6 - diaphragm.

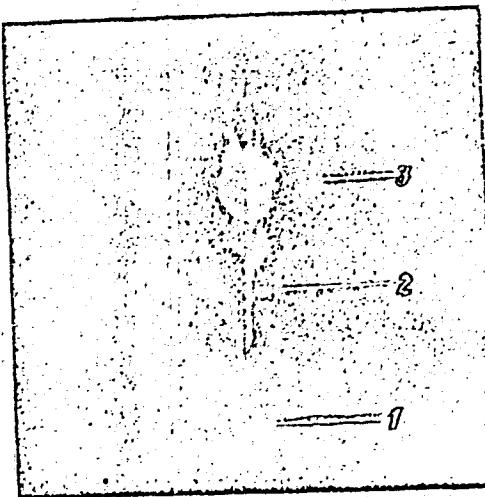


Fig. 2. Shock wave system

1 - Shock wave; 2 - reflected shock  
wave; 3 - oblique shock wave.

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ACC NR: AP6030928

and  $\gamma = 1.3$  shows that densities behind the second and third shock waves are  $\rho_2 = (\gamma + 1/\gamma - 1)\rho_1 = 80 \rho_0$  and  $\rho_3 = (\gamma + 1/\gamma - 1)\rho_2 \approx 600 \rho_0$ ; the flow velocity in the tube is found to be  $v = 67 \text{ km/sec}$  as against  $70 \text{ km/sec}$  obtained experimentally. [AB]  
Orig. art. has: 8 figures.

SUB CODE: 20/ SUBM DATE: 15Feb66/ ORIG REF: 007/ OTH REF: 002/ ATD PRESS:  
5082

Card 3/3 *pla*

L 21765-65

EWP(m)/EWA(h)/EWP(k)/EWT(d)/EWT(l)/EWT(m)/ETC(m)-o/EWA(q)/EWA(l)/EWT(n)

ACC NR: AP6010849

EWP(v) IJP(c)

SOURCE CODE: UR/0421/66/000/001/0121/0125

EN/WW

AUTHOR: Voytenko, D. M. (Moscow); Zubkov, A. I.; Panov, Yu. A. (Moscow)

ORG: none

TITLE: Supersonic gas flow around a cylindrical obstacle on a plate

SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 1, 1966, 121-125

TOPIC TAGS: supersonic aerodynamics, shock wave, shock wave analysis, flow field, flow separation, boundary layer, wind tunnel, supersonic shock wave

ABSTRACT: An experimental investigation of supersonic flows around a cylindrical obstacle mounted on a flat plate is described with the purpose of studying: shock /<sup>24</sup>/, ~~wave-boundary layer interaction~~, flow separation, pressure distribution, and flow configurations near cylinders of various diameters and heights. The investigation was carried out by means of a supersonic wind tunnel at  $M = 2.5$  and  $Re = 1.85 \times 10^7$ . Toepler's method was used for photo registering the visualized flow pattern. The experimental data were processed on a "STRELA" computer. A photograph of the flow field around a cylinder 12 mm in diameter and 15 mm high is presented and analyzed. The results presented in graphs seem to be in good agreement with available data. A schematic diagram of the flow field which was observed is presented (see Fig. 1). It is concluded that the results of the investigations of the three-dimensional structure of flow configurations near a cylindrical obstacle on a plate

81

B

2

Card 1/2

J. 21765-66

ACC NR: AP6010849

6

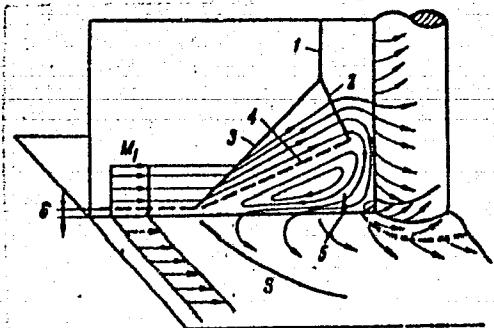


Fig. 1. Flow pattern

S - Line of separation; 1 - detached  
shock wave; 2 - straight shock wave;  
3 - oblique shock wave; 4 - stagnation  
zone boundary; 5 - minimum-pressure  
zone.

produced by supersonic free flows obtained here may be useful for further investigation of separation of a three-dimensional boundary layer and flows in separation zones. Orig. art. has: 7 figures and 2 formulas. [AB]

SUB CODE: 20/ SUBM DATE: 05Aug65/ ORIG REF: 001/ OTH REF: 004/ ATD PRESS:

4227

Card 2/2 PB

VOYENKO, F.P.

CA

88

Accelerating the centrifuging of a second-strike masscuite. E. P. Voitenko,  
Nauk. Zapiski Tashkrovi Prom. 10, No. 31, 75-80(1953).—Washing a second-strike  
masscuite with 25% brt molasses heated to 60-65° delivered from a specially designed  
spray after 7-10 min. of centrifuging decreases the rate of bleaching by 37%. The  
first run-off has a high d., which is explained by the fact that the thick syrup from the  
surface of the crystals is washed off. Although the temp. of the dil. molasses is 25-30°  
higher than that of the masscuite, no sugar is dissolved and the yield of sugar in the  
final molasses does not decrease. V. B. Baikov

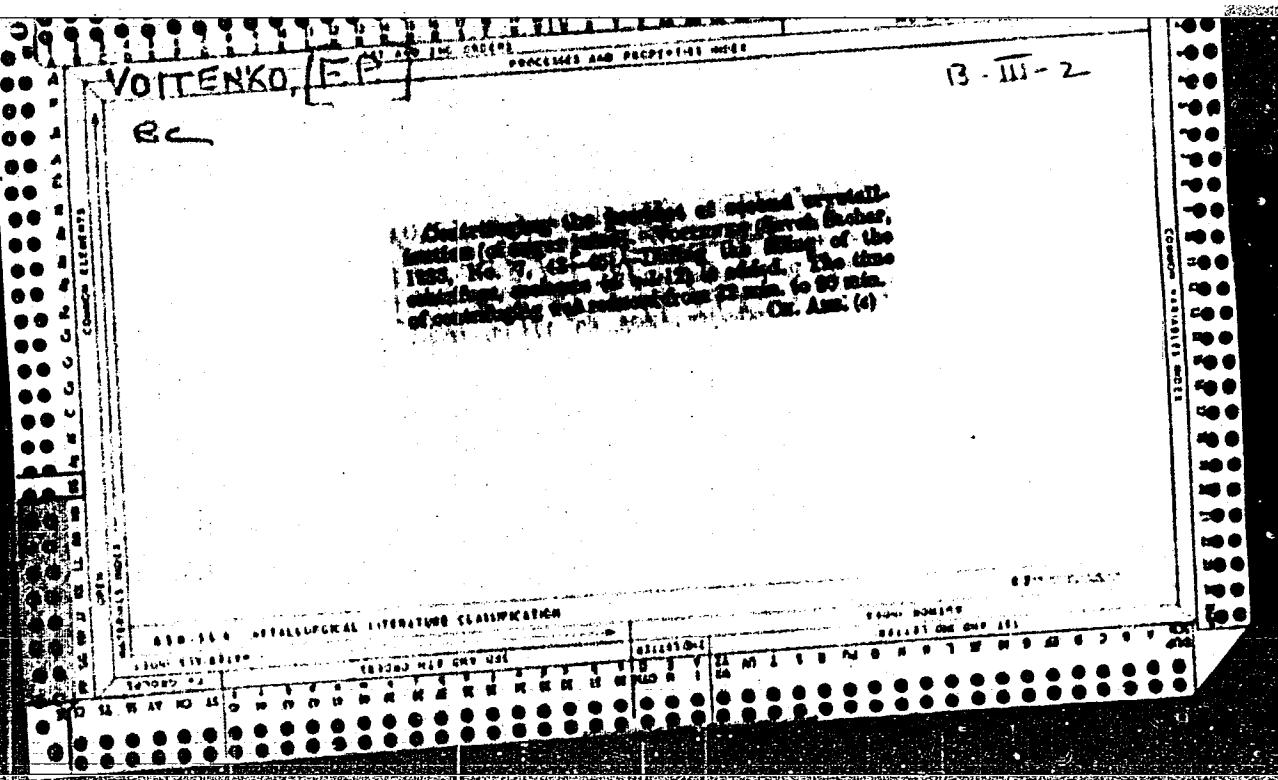
AS-11A METALLURGICAL LITERATURE CLASSIFICATION

VOLENKO, F-P.  
ca

2 D

Sugar-beet storage in a carbon dioxide atmosphere.  
M. I. Khlebnikov and V. P. Voltenko. Nezh. Zapiski  
Sakharot. Inst. 11, Book 49-1907-11, 1-11 (1934).  
Preserving of sugar beet in CO<sub>2</sub> proved satisfactory in lab.  
expts., and on a semi-factory scale. V. H. Balkow

AIA-514 - METALLURGICAL LITERATURE CLASSIFICATION



VOYTIENKO, F.P.

"Production of alcoholic fruit and berry beverages." S.A. Trusova,  
V.K. Fertman. Reviewed by F.P. Voitenko. Spirit. prom. 22 no.3:  
41-42 '56. (MIRA 9:11)

(Beverages) (Trusova, S.A.) (Fertman, V.K.)

VOYENKO, F.R.

VOYENKO, F.P.

Quality of the juice obtained from the cornelian cherry. Kons. 1  
ov. prom. 12 no.12t34-35 D '57. (MIRA 11:1)

1. Braylovskiy soko-morsovyy zavod..  
(Dogwood)

VOYTENKO, F.P.

Changes in the composition of cranberries during storage. Spirt. prom.  
24 no.1:36-37 '58. (MIRA 11:3)  
(Cranberries--Storage)

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VOYENKO, F.P.

Clouding of fermented cornelian cherry juice. Spirt. prom. 24  
no. 8:33 '58. (MIRA 11:12)  
(Fruit wines)

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CIA-RDP86-00513R001861120009-3"

X VOYTCENKO, G.A.

SPYNU, Ye.I.; KUNDIYEV, Yu.I.; VOYTENKO, G.A.; IVANOVA, Z.V.; LEBEDEVA, T.A.

Hygienic evaluation of working conditions when using chlorinated  
organic insecticides in controlling sugar beet pests. Mauch, trudy  
Inst. ent. i fit. AN URSR 7:58-62 '56. (MLRA 10:3)  
(Spraying and dusting--Hygienic aspects) (Insecticides)  
(Sugar beets--Diseases and pests)

VOYTBKO, G.A. (Kiyev)

Toxicological and hygienic characteristic of chlorothene, a new  
insecticide. Gig.truda i prof.zab. no.4:51-53 Jl-Ag '57:  
(MIREA 10:11)

1. Institut gigiyeny truda i profzabolevaniy.  
(PYRIDINE--TOXICOLOGY)

VOYTENKO, G. A. Cand Med Sci -- (diss) "Toxicological description of [REDACTED]  
[REDACTED] chlortene and polychlorpinene insecticides, and their hygienic standardization."  
Kiev; 1959. 19 pp (Kiev Order of Labor Red Banner Med Inst im Academician A. A.  
Bogomolets), 200 copies (KL, 44-59, 129)

VOITENKO, G.A.; KRASNYUK, Ye.P.; ZARITSKAYA, L.A.

Cases of intoxication from polychloropinene in farming. Vrach.  
delo. no.7:101-104 Jl '60. (MIRA 13:7)

1. Toksikologicheskaya Laboratoriya (rukoveditel' - dotsent L.I. Medved') i klinika professional'nykh zabolevaniy (rukoveditel' - prof. B.A. Krivoglas) Kiyevskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy.  
(PINEHE--TOXICOLOGY)

BURKATSKAYA, Ye.N., kand.med.nauk; VOYENKO, G.A., kand.med.nauk;  
KRASNYUK, Ye.P., nauchnyy sotrudnik

Working conditions and workers' health in the DDT industry.  
Gig. i san. 26 no.9:24-29 S '61. (MIRA 15:3)

1. Iz Kiyevskogo instituta gigiyeny truda i professional'nykh  
zabolevaniy.

(INDUSTRIAL HYGIENE)  
(DDT (INSECTICIDE))

MEDVED', L.I., doktor med. nauk, red.; BURKATSKAYA, Ye.N., kand.med.nauk, red.; VOYENKO, G.A., kand. med. nauk, red.; KAGAN, Yu.S., red.; KRIVOGLAZ, B.A., prof., red.; KUNDIYEV, Yu.I., kand. med. nauk, red.; MAKOVSKAYA, Ye.I., doktor med. nauk, red.; SEREBRYANAYA, S.G., dots., red.; SPYNU, Ye.I., kand. med. nauk, red.; TOSTANOVSKAYA, A.A., kand. med. nauk, red.; TROTSENKO, M.A., kand. khim. nauk, red.; NOVIKOV, Yu.V., red.; CHULKOV, I.F., tekhn. red.

[Hygiene and toxicology of new pesticides and clinical aspects of poisoning; reports of the Second All-Union Scientific Conference of the Committee for the Study and Reglementation of Poisonous Chemicals of the Main State Sanitary Inspection of the U.S.S.R.] Gigiena i toksikologiya novykh pestitsidov i klinika otravlenii; doklady 2-i Vsesoiuznoi nauchnoi konferentsii Komiteta po izucheniiu i reglamentatsii iadokhimikatov Glavnogo gosudarstvennogo sanitarnoi inspeksiya SSSR. Pod obshchei red. L.I. Medvedia. Moskva, Medgiz, 1962. 478 p. (MIRA 16:4)

1. Vsesoyuznaya nauchnaya konferentsiya po gigiyene i toksikologii insektofungitsidov, 2d, 1962.

(Continued on next card)

MEDVED', L.I.---(continued). Card 2.

2. Predsedatel' Komiteta gosudarstvennoy sanitarnoy inspeksii  
SSSR po izucheniyu i reglamentatsii yadokhimikatov (for,  
Medved'). 3. Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny  
truda i profzabolevaniy (for Burkatskaya, Voytenko, Spynu,  
Kagan, Trotsenko). 4. Ukrainskiy nauchno-issledovatel'skiy insti-  
tut pitaniya(for Serebryanaya).

(PESTICIDES--TOXICOLOGY)

VOYTENKO, G.M., kand.med.nauk; SIN'KOVSKAYA, K.V., kand.med.nauk  
(Dnepropetrovsk)

Oscillographic index as an indicator of vascular tonus. Klin.  
med. 39 no.5:30-31 My '61. (MIRA 14:5)

1. Iz Dnepropetrovskogo nauchno-issledovatel'skogo instituta  
vosstanovleniya i ekspertizy trudosposobnosti invalidov (dir. -  
kand.med.nauk A.S. Dantsetova).  
(BLOOD VESSELS) (OSCILLOGRAPHY)

LIBERMAN, I.M., dotsent; VOYTEJKO, G.M., kand.med.nauk (Dnepropetrovsk)

Changes in the alimentary canal in syringomyelia. Klin.med. 35  
[i.e.34] no.1 Supplement:46 Ja '57. (MIRA 11:2)

1. Iz Dnepropetrovskoy oblastnoy klinicheskoy bol'niitsy imeni  
Mechnikova (glavnnyy vrach I.A.Lobanova)  
(ALIMENTARY CANAL—DISEASES) (SYRINGOMYELIA)

POKROVSKIY, A.A., kand.pedagog.nauk, starshiy nauchnyy sotrudnik;  
BUROV, V.A., uchitel'; GLAZYRIN, A.I., starshiy nauchnyy sotrudnik,  
pensioner; DUBOV, A.G., starshiy nauchnyy sotrudnik; ZVORYKIN, B.S.,  
nauchnyy sotrudnik; KAMENETSKIY, S.Ye., uchitel'; KOSTIN, G.N., pre-  
podavatel'; MIRGORODSKIY, B.Yu., uchitel'; OREKHOV, V.P., prepoda-  
vatel'; ORLOV, P.P., prepodavatel'; RAZUMOVSKIY, V.G., aspirant;  
RUMYANTSEV, I.M., aspirant; TERENT'YEV, M.M., prepodavatel';  
KHOLYAPIN, V.G., prepodavatel'; SHAKHMAYEV, N.M., nauchnyy sotrudnik,  
uchitel'; VOYTEMKO, I.A., uchitel' sredney shkoly, pensioner; STA-  
ROSTIN, I.I., prepodavatel'; MOGILKO, A.D., aspirant; SEMAKIN, N.K.;  
KOPTHKOVA, L.A., red.; LAUT, V.G., tekhn.red.

[New school equipment for use in physics and astronomy] Novye  
shkol'nye pribory po fizike i astronomii. Pod red. A.A.Pokrovskogo.  
Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1959. 161 p. (MIRA 12:11)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut metodov  
obucheniya. 2. Laboratoriya metodiki fiziki Instituta metodov obuche-  
niya Akademii pedagogicheskikh nauk RSFSR (for Pokrovskiy). 3. Sred-  
nyaya zheleznodorozhnyaya shkola st.Kratovo, Moskovskoy oblasti (for  
Burov). 4. Institut metodov obucheniya Akademii pedagogicheskikh nauk  
(for Glazyrin, Dubov, Razumovskiy, Rumyantsev).

(Continued on next card)

POKROVSKIY, A.A.---(continued) Card 2.

5. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.315 Moskvy (for Zvorykin). 6. Srednyaya shkola No.212 Moskvy (for Kamenetskiy). 7. Krasnodarskiy pedinstitut (for Kostin). 8. Srednyaya shkola No.18 g.Sumy (for Mirgorodskiy); 9. Ryazanskiy pedinstitut (for Orekhov). 10. Stalingradskiy pedinstitut (for Orlov). 11. Moskovskiy gorodskoy pedinstitut; srednyaya shkola No.443 Moskvy (for Terent'yev). 12. Balashhevskiy pedinstitut (for Kholyapin). 13. Institut metodov obucheniya Akademii pedagog.nauk; srednyaya shkola No.215 Moskvy (for Shakhmayev). 14. Moskovskiy pedinstitut im. V.I.Lenina (for Starostin). 15. Pedinstitut im. V.I.Lenina v Moskve (for Mogilko). 16. Zaveduyushchiy narodnoy astronomiceskoy observatoriyy Dvortsu kul'tury Moskovskogo avtozavoda im. Likhacheva (for Semakin).

(Physical instruments)

VOYTENKO, I. A.

Periodic Law - Study and Teaching

Some problems of teaching the subject "Periodic law and D. I. Mendeleev's periodic system of elements. No. 4 Jl-Ag. '52. khim. v shkole

9. Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

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MARICH, Yu.V.; VOYTENKO, I.P.

Electrical contacts with the use of "bronze" dye paint. Lab.delo  
7 no.11:60 N '61. (MIRA 14:10)

1. Chernigovskaya oblastnaya sanitarno-epidemiologicheskaya  
stantsiya.  
(ELECTRIC CURRENTS—GROUNDING)

VOYTENKO, I.P.; GORODNICHIN, N.T.; DEREVYANKO, L.V.; ZAKRASNYANYY,  
P.D.; PARSHIN, V.F.; FURTOV, L.P.; SIDOROV, N.T.; SHAPOVALOV,  
I.F.; KOMAROVA, Ye.V., red.; ROMANOVA, S.F., tekhn.red.

[Telegraph devices using noncontact switches] Telegrafnye  
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TERPIGOROV, A. M., Academician,  
VOYTENKO, I. S.

"Use of Hydromechanization in the Mining of Manganese," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 4, 1941. Submitted 4, Jan 1941.

■ Report U-1530, 25 Oct 1951

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VOYTENKO, I.S., inzhener.

Blasting operations in coal mining in England (from foreign  
journals). Shakht. stroi. no.8-31-32 Ag '57. (MLRA 10:9)  
(Great Britain--Coal mines and mining) (Blasting)

VOYTEMKO, I.S., gornyy inzhener.

Readers' response to G.M. Dobrov's article "History of the  
initial period in mechanizing national coal industries."  
Ugol' 32 no.6:43 Je '57. (MIRA 10:7)  
(Coal mining machinery)

VOYTENKO, I. S.

UVANOV, K.I.; KRASNIKOV, Yu.D.; TISHCHENKO, N.A.; VOYTENKO, I.S., gornyy  
inzhener.

New mining methods; parts 7 and 8. Ugol' 32 no.7:22-25 Jl '57.  
(MIRA 10:7)

1. Vsesoyuznyy Ugol'nyy institut (for Ivanov, Krasnikov, Tishchenko).  
(Coal mines and mining)

VOYTKENKO, I.S., referent, inzh.

Regulating tension on conveyor belts (from "Coal Trades Review"  
no. 4629, 1957). Gor. zhur. no. 2:73-74 F '58. (MIRA 11:3)  
(Conveying machinery)

VOYTENKO, I.S.

Viewsheets for mine haulage in shaft bottoms and at the surface  
of reorganized English mines. Ugol' 34 no.1:53-56 Ja '59.

(MIRA 12:1)

(Great Britain--Mine haulage)

VOYTENKO, I.S., inzh.

Conference on tunneling and mine development. Transp.stroi. 10  
no.4:54-55 Ap '60. (MIRA 15:9)  
(Tunneling) (Mining engineering)

VOYTEMKO, I.S., inzh.

Construction of a double-track tunnel in the United States. Transp.  
stroi. 10 no.6:56-57 Je '60.  
(MIRA 13:7)  
(United States—Tunneling)